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December 21, 2005

Case Serial Number: 10/719465

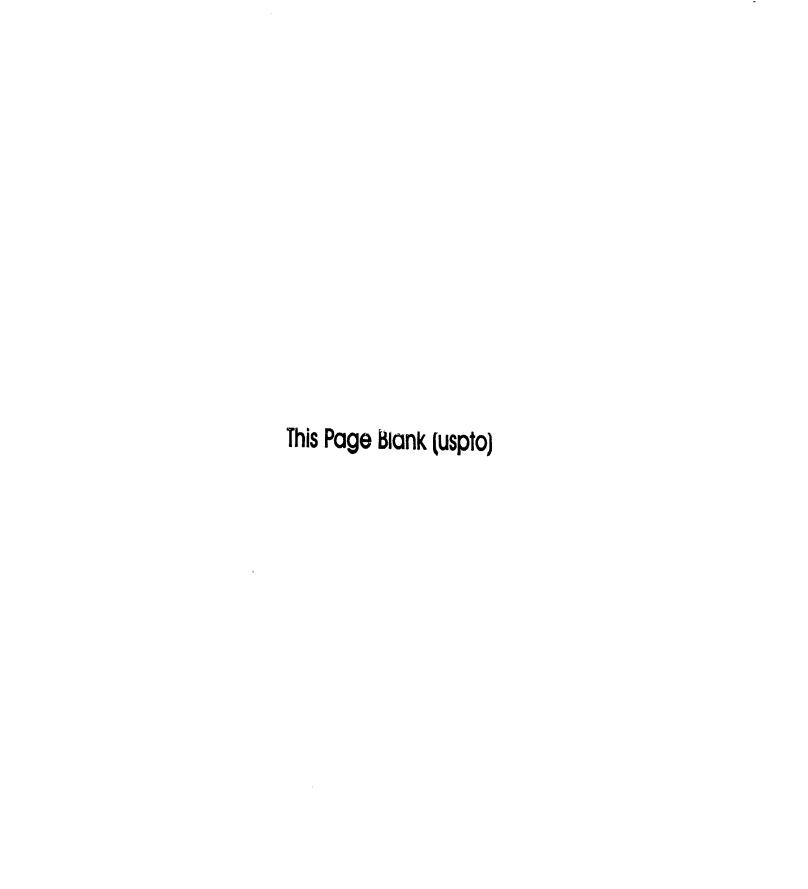
From: P. Sheppard

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Search Notes	
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(FILE 'REGISTRY' ENTERED AT 11:28:13 ON 21 DEC 2005)
L3 STR
L4 50 SEA SSS SAM L3
L5 27407 SEA SSS FUL L3
L6 STR
L7 55 SEA SUB=L5 SSS FUL L6

FILE 'HCAPLUS' ENTERED AT 12:00:59 ON 21 DEC 2005
L8 6 SEA ABB=ON PLU=ON L7
D STAT QUE
D IBIB ABS HITSTR L8 1-6

FILE HCAPLUS

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FILE COVERS 1907 - 21 Dec 2005 VOL 143 ISS 26 FILE LAST UPDATED: 20 Dec 2005 (20051220/ED)

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FILE COVERS 1907 - 21 Dec 2005 VOL 143 ISS 26 FILE LAST UPDATED: 20 Dec 2005 (20051220/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

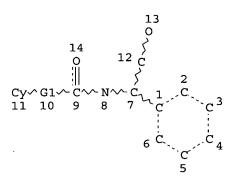
This file contains CAS Registry Numbers for easy and accurate substance identification.

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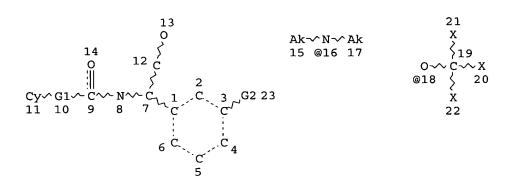
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GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L5 27407 SEA FILE=REGISTRY SSS FUL L3

L6 STR



REP G1=(0-2) C VAR G2=16/18/HY NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE

L7 55 SEA FILE=REGISTRY SUB=L5 SSS FUL L6
L8 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L7

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=> d ibib abs hitstr 18 1-6

L8 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:470948 HCAPLUS

DOCUMENT NUMBER: 141:38448

TITLE: Preparation of arylcyclopropylcarboxylic amides as

potassium channel openers

INVENTOR(S): Wu, Yong-jin; Sun, Li-qiang; L'heureux, Alexandre

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.			KIN	D :	DATE			APPL:	ICAT	ION :	NO.		D	ATE					
				-									_						
WO 2004047738			A2 20040610			WO 2003-US37305					20031121								
WO 2004047738			A3		2004	1007													
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NI,	NO,	
			NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
			TM,	TN,	TR,	TT,	TZ,	UA,	UG,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw			
		RW:	BW.	GH.	GM.	KE.	LS.	MW.	MZ.	SD.	SL.	SZ.	TZ.	UG.	ZM.	ZW.	AM.	AZ.	

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BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2004110754 20040610 US 2003-719184 Α1 20031121 EP 2003-786986 EP 1565190 A2 20050824 20031121 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK PRIORITY APPLN. INFO.: US 2002-428337P P 20021122 WO 2003-US37305 W 20031121 OTHER SOURCE(S): MARPAT 141:38448

GI

The title compds. [I; R = alkyl, CF3, hydroxymethyl; R1, R2 = H, alkyl, AB halo, morpholin-4-yl; R4 = (un) substituted morpholin-4-yl, pyridinyl, pyrimidinyl, etc.; R5 = H, F; or R4 and R5 taken together = CH:CHCH:CH, CH2CH2O; R3, R6, R7 = H, F] which are openers or activators of KCNQ potassium channels (biol. data given), were prepared Thus, amidation of 1-(2,3-dihydrobenzofuran-5-yl)ethylamine with 2-(4chlorophenyl)cyclopropanecarboxylic acid afforded the amide II. present invention also provides pharmaceutical compns. comprising the compds. I, and the method of treatment of disorders sensitive to KCNQ potassium channel opening activity such as migraine or a migraine attack, bipolar disorders, epilepsy, acute and chronic pain and anxiety.

ΙT 701913-77-1P 701913-78-2P 701913-79-3P 701913-80-6P 701913-81-7P 701913-82-8P 701913-83-9P 701913-84-0P

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of arylcyclopropanecarboxamides as potassium channel openers) 701913-77-1 HCAPLUS RN

CN Cyclopropanecarboxamide, N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2hydroxyethyl]-2-phenyl- (9CI) (CA INDEX NAME)

RN 701913-78-2 HCAPLUS

CN Cyclopropanecarboxamide, 2-(2-chlorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701913-79-3 HCAPLUS

CN Cyclopropanecarboxamide, 2-(3-chlorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701913-80-6 HCAPLUS

CN Cyclopropanecarboxamide, 2-(4-chlorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701913-81-7 HCAPLUS

.CN Cyclopropanecarboxamide, N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-2-(2-fluorophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701913-82-8 HCAPLUS

CN Cyclopropanecarboxamide, N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2hydroxyethyl]-2-(3-fluorophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701913-83-9 HCAPLUS

CN Cyclopropanecarboxamide, N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-2-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701913-84-0 HCAPLUS

CN Cyclopropanecarboxamide, 2-(2,5-difluorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:467693 HCAPLUS

DOCUMENT NUMBER: 141:38621

TITLE: Preparation of N-(1-aryl-2-hydroxyethyl) amides as

potassium channel openers

INVENTOR(S): Wu, Yong-Jin; Sun, Li-Qiang; He, Huan; L'Heureux,

Alexandre

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		APPLICATION NO.				
WO 2004047743	λ2 20040610	WO 2003-US37348				
			20031121			
WO 2004047743	A3 20040729					
W: AE, AG, A	AL, AM, AT, AU, AZ,	BA, BB, BG, BR, BW, E	BY, BZ, CA, CH,			
CN, CO, C	CR, CU, CZ, DE, DK,	DM, DZ, EC, EE, EG, E	ES, FI, GB, GD,			
GE, GH, C	GM, HR, HU, ID, IL,	IN, IS, JP, KE, KG, K	KP, KR, KZ, LC,			
LK, LR, I	LS, LT, LU, LV, MA,	MD, MG, MK, MN, MW, M	IX, MZ, NI, NO,			
NZ, OM, I	PG, PH, PL, PT, RO,	RU, SC, SD, SE, SG, S	SK, SL, SY, TJ,			
TM, TN, T	TR, TT, TZ, UA, UG,	UZ, VC, VN, YU, ZA, Z	ZM, ZW			
RW: BW, GH, C	GM, KE, LS, MW, MZ,	SD, SL, SZ, TZ, UG, Z	ZM, ZW, AM, AZ,			
BY, KG, I	KZ, MD, RU, TJ, TM,	AT, BE, BG, CH, CY, C	CZ, DE, DK, EE,			
ES, FI, I	FR, GB, GR, HU, IE,	IT, LU, MC, NL, PT, R	RO, SE, SI, SK,			
TR, BF, F	BJ, CF, CG, CI, CM,	GA, GN, GQ, GW, ML, M	IR, NE, SN, TD, TG			
US 2004122007	A1 20040624	US 2003-719465	20031121			
EP 1581510	A2 20051005	EP 2003-789925	20031121			
R: AT, BE, (CH, DE, DK, ES, FR,	GB, GR, IT, LI, LU, N	NL, SE, MC, PT,			
IE, SI, I	LT, LV, FI, RO, MK,	CY, AL, TR, BG, CZ, E	EE, HU, SK			
PRIORITY APPLN. INFO.	:	US 2002-428338P	P 20021122			
		WO 2003-US37348	W 20031121			
OTHER SOURCE(S):	MARPAT 141:3862	1				

Page 6

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AB The title compds. [I; R1 = pyridinyl, 3-quinolinyl, 2-thienyl, furanyl, cycloalkyl, Ph; A = CH:CH, (CH2)n; R2 = H, hydroxymethyl; n = 0-2; R4 = dialkylamino, OCF3, morpholin-4-yl, etc.; R5 = H, F; or R4 and R5 taken together = (un)substituted CH:CHCH:CH; R3, R6, R7 = H, F] which are openers or activators of KCNQ potassium channels (biol. data given), were prepared Thus, amidation of (R)-2-amino-2-[3-(morpholin-4-ylmethyl)phenyl]ethanol hydrochloride (preparation given) with 2-fluorocinnamic acid afforded (R)-II. The present invention also provides pharmaceutical compns. comprising compds. I and the method of treatment of disorders sensitive to KCNQ potassium channel opening activity such as migraine or a migraine attack, bipolar disorders, epilepsy, acute and chronic pain and anxiety.

TT 701942-88-3P 701942-89-4P 701942-90-7P 701942-91-8P 701942-92-9P 701942-93-0P 701942-94-1P 701942-95-2P 701942-96-3P 701942-97-4P 701942-98-5P 701942-99-6P 701943-00-2P 701943-01-3P 701943-02-4P 701943-05-7P 701943-06-8P 701943-07-9P 701943-08-0P 701943-09-1P 701943-10-4P 701943-11-5P 701943-12-6P 701943-13-7P 701943-14-8P 701943-15-9P 701943-16-0P 701943-17-1P 701943-18-2P 701943-19-3P 701943-91-1P 701943-92-2P RL: PAC (Pharmacological activity); SP

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-(1-aryl-2-hydroxyethyl) amides as potassium channel openers)

RN 701942-88-3 HCAPLUS

CN 2-Propenamide, N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]-3-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

RN 701942-89-4 HCAPLUS

CN Benzenepropanamide, N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 701942-90-7 HCAPLUS

CN 2-Propenamide, 3-(2-fluorophenyl)-N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 701942-91-8 HCAPLUS

CN 2-Propenamide, 3-(3-fluorophenyl)-N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 701942-92-9 HCAPLUS

CN 2-Propenamide, 3-(2,4-difluorophenyl)-N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 701942-93-0 HCAPLUS

CN 2-Propenamide, 3-(2,3-difluorophenyl)-N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 701942-94-1 HCAPLUS

CN 2-Propenamide, 3-(2,5-difluorophenyl)-N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 701942-95-2 HCAPLUS

CN 2-Propenamide, 3-(3,5-difluorophenyl)-N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

RN 701942-96-3 HCAPLUS

CN 2-Propenamide, 3-(2-chloro-4-fluorophenyl)-N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 701942-97-4 HCAPLUS

CN 2-Propenamide, 3-(2-chloro-6-fluorophenyl)-N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 701942-98-5 HCAPLUS

CN 2-Propenamide, N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]-3-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 701942-99-6 HCAPLUS

CN 2-Propenamide, 3-(2,6-difluorophenyl)-N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 701943-00-2 HCAPLUS

CN 2-Propenamide, 3-(4-chloro-2-fluorophenyl)-N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 701943-01-3 HCAPLUS

CN 2-Propenamide, N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]-3-(4-methylphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

RN 701943-02-4 HCAPLUS

CN 2-Propenamide, N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]-3-(3-methylphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 701943-03-5 HCAPLUS

CN 2-Propenamide, N-[(1R)-2-hydroxy-1-[3-(4-morpholinyl)phenyl]ethyl]-3-(2-methylphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 701943-04-6 HCAPLUS

CN 2-Propenamide, 3-(2-chlorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-05-7 HCAPLUS

CN 2-Propenamide, N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-3-(2-fluorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-06-8 HCAPLUS

CN 2-Propenamide, N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-3-(3-fluorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-07-9 HCAPLUS

CN 2-Propenamide, N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-3-(4-fluorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-08-0 HCAPLUS

CN 2-Propenamide, N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-3-phenyl-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-09-1 HCAPLUS

CN 2-Propenamide, 3-(4-chlorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-10-4 HCAPLUS

CN 2-Propenamide, N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-3-(2-methylphenyl)-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-11-5 HCAPLUS

CN 2-Propenamide, N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-3-(4-methylphenyl)-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 701943-12-6 HCAPLUS

CN 2-Propenamide, 3-(2,4-difluorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-13-7 HCAPLUS

CN 2-Propenamide, 3-(2,5-difluorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-14-8 HCAPLUS

CN 2-Propenamide, 3-(2,6-difluorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 701943-15-9 HCAPLUS

CN 2-Propenamide, 3-(3,4-difluorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-16-0 HCAPLUS

CN 2-Propenamide, 3-(3,5-difluorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-17-1 HCAPLUS

CN 2-Propenamide, 3-(4-chloro-2-fluorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-18-2 HCAPLUS

CN 2-Propenamide, 3-(2-chloro-4-fluorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-19-3 HCAPLUS

CN 2-Propenamide, 3-(2-chloro-6-fluorophenyl)-N-[(1R)-1-[4-fluoro-3-(4-morpholinyl)phenyl]-2-hydroxyethyl]-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 701943-91-1 HCAPLUS

CN 2-Propenamide, N-[2-hydroxy-1-[3-(3-pyridinyl)phenyl]ethyl]-3-phenyl-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 701943-92-2 HCAPLUS

CN 2-Propenamide, 3-(2-fluorophenyl)-N-[2-hydroxy-1-[3-(3-pyridinyl)phenyl]ethyl]- (9CI) (CA INDEX NAME)

L8 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

Lambkin 10 719465

. ACCESSION NUMBER: 1999:629455 HCAPLUS

DOCUMENT NUMBER: 131:351666

TITLE: Two Syntheses of the 16- and 17-Membered DEF Ring

Systems of Chloropeptin and Complestatin

AUTHOR(S): Elder, Amy M.; Rich, Daniel H.

CORPORATE SOURCE: Department of Chemistry and School of Pharmacy, University of Wisconsin, Madison, WI, 53706, USA

SOURCE: Organic Letters (1999), 1(9), 1443-1446

CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 131:351666

AB Two syntheses of a model system of the DEF ring system of complestatin and chloropeptin are described. The key step in both of these syntheses involves the formation of the biaryl linkage using a palladium-catalyzed Suzuki cross-coupling reaction and a catalytic enantioselective ene reaction to form the 6-bromo-D-tryptophan. Addnl., ring contraction of the 17-membered DEF ring system of complestatin generates the 16-membered DEF ring system of chloropeptin in a biomimetic fashion.

IT 250608-85-6P 250608-86-7P 250608-87-8P

250608-88-9P 250608-89-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of in the synthesis of the 16- and 17-membered DEF ring systems of chloropeptin and complestatin)

RN 250608-85-6 HCAPLUS

CN 8-Oxa-2,5-diaza-9-silaundecanoic acid, 6-[4-methoxy-3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]-10,10-dimethyl-4-oxo-9,9-diphenyl-3-(phenylmethyl)-, 1,1-dimethylethyl ester, (3R,6R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 250608-86-7 HCAPLUS

CN D-Tryptophan, 6-[5-[(1R)-1-[[(2R)-2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxo-3-phenylpropyl]amino]-2-[[(1,1-dimethylethyl)diphenylsilyl]oxy]ethyl]-2-methoxyphenyl]-N,1-bis[(4-methylphenyl)sulfonyl]-, ethyl ester (9CI) (CA INDEX NAME)

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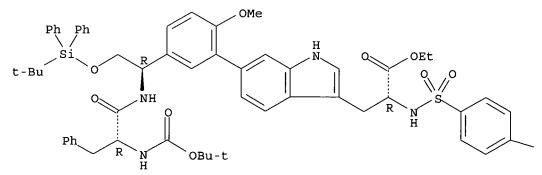
PAGE 2-A

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RN 250608-87-8 HCAPLUS

CN D-Tryptophan, 6-[5-[(1R)-1-[[(2R)-2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxo-3-phenylpropyl]amino]-2-[[(1,1-dimethylethyl)diphenylsilyl]oxy]ethyl]-2-methoxyphenyl]-N-[(4-methylphenyl)sulfonyl]-, ethyl ester (9CI) (CA INDEX NAME)

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PAGE 1-B

__ Me

RN 250608-88-9 HCAPLUS

CN D-Tryptophan, 6-[5-[(1R)-1-[[(2R)-2-amino-1-oxo-3-phenylpropyl]amino]-2-[[(1,1-dimethylethyl)diphenylsilyl]oxy]ethyl]-2-methoxyphenyl]-N-[(4-methylphenyl)sulfonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

● HCl

PAGE 1-B

`Me

RN 250608-89-0 HCAPLUS

CN D-Phenylalaninamide, 6-bromo-N-[(4-methylphenyl)sulfonyl]-D-tryptophyl-N-

[(1R)-2-[[(1,1-dimethylethyl)diphenylsilyl]oxy]-1-[4-methoxy-3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 250608-77-6

CN

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of in the synthesis of the 16- and 17-membered DEF ring systems of chloropeptin and complestatin)

RN 250608-77-6 HCAPLUS

Benzenepropanamide, α -amino-N-[(1R)-2-[[(1,1-dimethylethyl)diphenylsilyl]oxy]-1-[4-methoxy-3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]ethyl]-, monohydrochloride, (α R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 1997:238389 HCAPLUS

Lambkin 10_719465

DOCUMENT NUMBER: 126:287587

TITLE: Probing the Environment of Tubulin-Bound Paclitaxel

Using Fluorescent Paclitaxel Analogs

AUTHOR(S): Sengupta, Suparna; Boge, Thomas C.; Liu, Yanbin;

Hepperle, Michael; Georg, Gunda I.; Himes, Richard H. Departments of Biochemistry and Medicinal Chemistry,

University of Kansas, Lawrence, KS, 66045, USA

Biochemistry (1997), 36(17), 5179-5184

CODEN: BICHAW; ISSN: 0006-2960

American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

CORPORATE SOURCE:

SOURCE:

PUBLISHER:

To determine the environment of different positions in the paclitaxel mol. when bound to tubulin, we have synthesized six fluorescent analogs in which a (dimethylamino) benzoyl group has been introduced into the 7- and 10-positions, and the benzoyl groups at the 2- and N- as well as the 3'-Ph ring have been modified with dimethylamino functions. In a tubulin assembly assay, the N-m- and N-p-(dimethylamino)benzoyl derivs. had activities comparable to the activity of paclitaxel. The 2-, 3'-, and 10-analogs had slightly reduced activity, and the 7-derivative was about 5% as active as paclitaxel. On the basis of the results of studies of the effect of solvents on the fluorescence emission spectra, it is proposed that the unbound analogs form hydrogen bonds with protic solvents. But the 7- and 10-substituted analogs appear to be more affected by protic solvents than the other analogs. Previously, we studied the binding of the N-meta derivative to tubulin and microtubules [Sengupta, S., et al. (1995) Biochem. 34, 11889-11894]. In this study, we extended the studies to include the 2-, 7-, and 10-derivs. Similar to the N-substituted analog, binding of the 2-derivative to tubulin was accompanied by a large blue shift, whereas a very small shift occurred when the 7- and 10-substituted derivs. bound. The 2- and N-substituted analogs bind to microtubules with an increase in fluorescence intensity over that which was observed with tubulin, whereas binding of the 7- and 10-substituted analogs was accompanied by a large quenching in fluorescence. This quenching may be due to the presence of charged residues in the protein near the 7- and 10-(dimethylamino)benzoyl groups or to π stacking of the groups with an aromatic side chain. The presence of paclitaxel with microtubules prevented the fluorescence increase of the 2- and N-derivs. and quenching of the 7and 10-derivs. The difference in behavior of the fluorescent analogs upon binding to polymerized tubulin, coupled with the solvent studies on the free drugs, suggests that the 2- and N-benzoyl groups of paclitaxel bind in a hydrophobic pocket of tubulin but could participate in hydrogen bonding, and the 7- and 10-positions are in a more hydrophilic environment.

IT 160313-76-8

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(tubulin binding by fluorescent paclitaxel analogs)

RN 160313-76-8 HCAPLUS

CN Benzenepropanoic acid, β-(benzoylamino)-3-(dimethylamino)-αhydroxy-, 6,12b-bis(acetyloxy)-12-(benzoyloxy)2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl
ester, [2aR-[2aα,4β,4aβ,6β,9α(αR*,βS
*),11α,12α,12aα,12bα]]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:120883 HCAPLUS

DOCUMENT NUMBER: 122:81681

TITLE: Synthesis and biology of substituted 3'-phenyl taxol

analogs

AUTHOR(S): Georg, Gunda I.; Cheruvallath, Zacharia S.; Harriman,

Geraldine C. B.; Hepperle, Michael; Park, Haeil;

Himes, Richard H.

CORPORATE SOURCE: Department of Medicinal Chemistry, University of

Kansas, Lawrence, KS, 66045, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (1994),

4(19), 2331-6

CODEN: BMCLE8; ISSN: 0960-894X

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 122:81681

GΙ

AB A series of substituted 3'-Ph taxol analogs I (Ar = 4-ClC6H4, 4-MeC6H4, 4-MeOC6H4, 2-Me6H4, etc.), directed by the Topliss Operational Scheme, were synthesized and evaluated for their biol. activity. The novel analogs were prepared from baccatin III and N-acyl β -lactams. Evaluation in the microtubule assembly assay and for cytotoxicity against B16 melanoma cells illustrated a modest influence of aromatic substitution on bioactivity.

Ι

IT 160314-00-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of taxol analogs, their tubulin assembly promotion and antitumor activity)

160314-00-1 HCAPLUS RN

CN Benzenepropanoic acid, β -(benzoylamino)-3-(dimethylamino)- α -[[(1,1-dimethylethyl)dimethylsilyl]oxy]-, 6,12b-bis(acetyloxy)-12-(benzoyloxy) -2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-11-hydroxy-4a,8,13,13-tetramethyl-5-oxo-4-[(triethylsilyl)oxy]-7,11-methano-1Hcyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, [2aR- $[2a\alpha, 4\beta, 4a\beta, 6\beta, 9\alpha(\alpha R^*, \beta S^*), 11\alpha]$ $[12\alpha, 12a\alpha, 12b\alpha]$ - (9CI) (CA INDEX NAME)

IT 160313-76-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation, tubulin assembly promotion, and antitumor activity)

RN 160313-76-8 HCAPLUS

Benzenepropanoic acid, β -(benzoylamino)-3-(dimethylamino)- α -CN hydroxy-, 6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, $[2aR-[2a\alpha,4\beta,4a\beta,6\beta,9\alpha(\alpha R*,\beta S$ *), 11α , 12α , $12a\alpha$, $12b\alpha$]] - (9CI) (CA INDEX NAME)

L8 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1982:68704 HCAPLUS

DOCUMENT NUMBER: 96:68704

TITLE: Cephalosporin derivatives and pharmaceutical

compositions containing them

INVENTOR(S): Wehrli, Hansuli; Kocsis, Karoly; Scartazzini, Riccardo

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz. SOURCE: Eur. Pat. Appl., 177 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT 1	NO.	KIND	DATE	APPLICATION NO.		DATE
					-	
EP 3179	4	A2	19810708	EP 1980~810386		19801215
EP 3179	4	A3	19820203			
R:	AT, BE, CH,	DE, FR,	GB, IT,	LU, NL, SE		
US 4464	366	Α	19840807	US 1980-214155		19801208
ES 4978	49	A1	19811116	ES 1980-497849		19801217
DK 8005	408	Α	19810620	DK 1980-5408		19801218
AU 8065	518	A1	19810625	AU 1980-65518		19801218
ZA 8007	914	Α	19820127	ZA 1980-7914		19801218
JP 5610	3186	A2	19810818	JP 1980-181821		19801219
PRIORITY APP	LN. INFO.:			CH 1979-11283	Α	19791219
GI						

$$\begin{array}{cccc} \text{HO}_2\text{CCH} \left(\text{NH}_2\right) \left(\text{CH}_2\right)_n \text{XX}^1 \text{NH} \left(\text{CH}_2\right)_m \text{X}^2 \text{CHCONH} & \\ \left(\text{OC}\right)_p & \text{NCX}^3 \text{NH} & \\ & & & \\ \text{R}^2 \text{N} & & \text{X}^4 & \\ & & & & \\ \end{array}$$

$$\begin{array}{c|c} \text{HO}_2\text{CCH (NH}_2)\text{ CH}_2\text{O}_2\text{CNH} & \begin{array}{c} \text{CHCONH} \\ \text{O} \\ \text{N} \end{array} \\ \begin{array}{c} \text{CH}_2\text{S} \\ \text{Me} \end{array} \\ \end{array} \begin{array}{c} \text{N} \\ \text{N} \\ \text{Me} \end{array}$$

AB Cephalosporins I [m = 0, 1; n = 1-4; p = 1, 2; X = 0, S, NH, bond; X1 = CO, CONHSO2, SO2NHCO; X2 = (un)substituted phenylene, thienylene, furylene; X3 = 0, S; X4 = alkylene; R = H, alkyl, alkoxy, halo, esterified or etherified CH2OH, CH2SH, ammoniummethyl; R1 = H, OMe; R2 = H, (un)substituted alkyl, cycloalkyl, acyl] were prepared as bactericides (no data). Thus II was obtained from the aminocephem by a 2-step acylation and deblocking.

IT 79537-77-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and acylation of aminocephems by)

RN 79537-77-2 HCAPLUS

CN Benzeneacetic acid, $3-[[(1,1-dimethylethoxy)carbonyl]methylamino]-\alpha-[[(4-ethyl-2,3-dioxo-1-piperazinyl)carbonyl]amino]- (9CI) (CA INDEX NAME)$

IT 79537-79-4P 79553-65-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and deblocking of)

RN 79537-79-4 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,
7-[[[3-[[(1,1-dimethylethoxy)carbonyl]methylamino]phenyl][[(4-ethyl-2,3-dioxo-1-piperazinyl)carbonyl]amino]acetyl]amino]-3-[[(1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-, diphenylmethyl ester, [6R-(6α,7β)](9CI) (CA INDEX NAME)

RN 79553-65-4 HCAPLUS
CN D-Serine, N-[(1,1-dimethylethoxy)carbonyl]-, diphenylmethyl ester,
 [3-[2-[[2-[(diphenylmethoxy)carbonyl]-3-[[(1-methyl-1H-tetrazol-5-yl)thio]methyl]-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-en-7-yl]amino]-1 [[(4-ethyl-2,3-dioxo-1-piperazinyl)carbonyl]amino]-2 oxoethyl]phenyl]methylcarbamate (ester), [6R-(6α,7β)]- (9CI)
 (CA INDEX NAME)

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Lambkin 10_719465

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